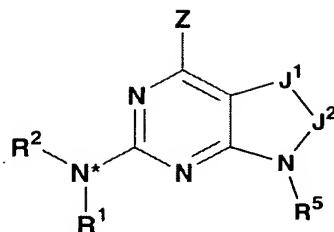


We claim:

1. A compound of Formula (I)



5 (I)

their enantiomers, diastereomers, and pharmaceutically acceptable salts, prodrugs and solvates thereof, wherein:

R¹ is hydrogen or alkyl;

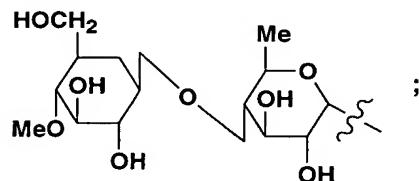
R² is

10 (a) heteroaryl or heterocyclo, either of which may be optionally independently substituted with one to three groups selected from T¹, T² and/or T³;

(b) aryl substituted with one to three groups selected from T¹, T², and/or T³ provided that at least one of T¹, T² and/or T³ is other than H; or

(c) aryl fused to a heteroaryl or heterocyclo ring forming a fused ring system bound to N* through the aryl wherein the fused ring system may be optionally independently substituted with one to three groups selected from T¹, T² and/or T³;

15 provided that R² is not



20 Z is -NR³R⁴, -NR³SO₂R⁶, OR⁴, SR⁴, haloalkyl or halogen;

J¹ is O, S, S(O), S(O)₂ or optionally substituted C₁₋₃ alkylene;

J² is carbonyl or optionally substituted C₁₋₃ alkylene, provided that J¹ and J² taken together do not form an alkylene chain of greater than 4 carbon atoms;

R^3 and R^4 are independently H, alkyl, alkenyl, aryl, (aryl)alkyl, heteroaryl, (heteroaryl)alkyl, cycloalkyl, (cycloalkyl)alkyl, heterocyclo or (heterocyclo)alkyl, any of which may be optionally independently substituted where valance allows with one to three groups T^4 , T^5 and/or T^6 ;

5 or R^3 and R^4 may be taken together with the nitrogen atom to which they are attached to form a heterocyclo or heteroaryl ring, either of which is optionally independently substituted where valance allows with one to three groups independently selected from T^4 , T^5 and/or T^6 ;

R^5 is

10 (i) H, cyano, alkyl, alkenyl, alkynyl, cycloalkyl, (cycloalkyl)alkyl, aryl, (aryl)alkyl, heterocyclo, (heterocyclo)alkyl, heteroaryl or (heteroaryl)alkyl, any of which may be independently substituted where valance allows with one to three groups T^7 , T^8 and/or T^9 ; or
 (ii) $-C(O)_tR^7$, $-C(O)-C(O)-C(O)OR^7$ or $-SO_2R^8$;

15 R^6 is alkyl, alkenyl, aryl, (aryl)alkyl, heteroaryl, (heteroaryl)alkyl, cycloalkyl, (cycloalkyl)alkyl, heterocyclo, or (heterocyclo)alkyl, any of which may be optionally independently substituted where valance allows with one to three groups T^4 , T^5 and/or T^6 ;

R^7 is

20 (i) H, alkyl, alkenyl, heterocyclo, (heterocyclo)alkyl, (hydroxy)alkyl, (alkoxy)alkyl, (aryloxy)alkyl, heteroaryl, aryl or (aryl)alkyl, any of which may be optionally independently substituted where valance allows with one to three groups T^7 , T^8 and/or T^9 ; or
 (ii) $-NR^9R^{10}$ or $(NR^9R^{10})alkyl$;

25 R^8 is

(i) alkyl, alkenyl, heterocyclo, (heterocyclo)alkyl, (hydroxy)alkyl, (alkoxy)alkyl, (aryloxy)alkyl, heteroaryl, aryl or (aryl)alkyl, any of which may be optionally independently substituted where valance allows with one to three groups T^7 , T^8 and/or T^9 ; or
 30 (ii) $-NR^9R^{10}$ or $(NR^9R^{10})alkyl$;

;

R^9 and R^{10} are independently H, alkyl, alkenyl, aryl, (aryl)alkyl, heteroaryl, (heteroaryl)alkyl, cycloalkyl, (cycloalkyl)alkyl, heterocyclo or (heterocyclo)alkyl, any of which may be optionally independently substituted where valance allows with one to three groups T^7 , T^8 and/or T^9 ;

5 T^1-T^9 are each independently

- (i) alkyl, (hydroxy)alkyl, (alkoxy)alkyl, alkenyl, alkynyl, cycloalkyl, (cycloalkyl)alkyl, cycloalkenyl, (cycloalkenyl)alkyl, aryl, (aryl)alkyl, heterocyclo, (heterocyclo)alkyl, heteroaryl or (heteroaryl)alkyl, any of which may be optionally independently substituted by one or more groups selected from alkyl, (hydroxy)alkyl, halo, cyano, nitro, OH, oxo, (alkoxy)alkyl, alkenyl, alkynyl, cycloalkyl, (cycloalkyl)alkyl, aryl, (aryl)alkyl, heterocyclo, (heterocyclo)alkyl, heteroaryl or (heteroaryl)alkyl, $-OT^{10}$, $-SH$, $-ST^{10}$, $-C(O)_tH$, $-C(O)_tT^{10}$, $-O-C(O)T^{10}$, $T^{17}C(O)_tN(T^{11})T^{10}-SO_3H$, $-S(O)_tT^{10}$, $S(O)_tN(T^{11})T^{10}$, $-T^{12}-NT^{14}T^{15}$, $-T^{12}-N(T^{11})-T^{13}-NT^{14}T^{15}$, $-T^{12}-N(T^{16})-T^{15}-T^{10}$ and $-T^{12}-N(T^{16})-T^{13}-H$; or
- (ii) halo, cyano, nitro, OH, oxo, $-SH$, amino, $-OT^{10}$, $-ST^{10}$, $-C(O)_tH$, $-C(O)_tT^{10}$, $-O-C(O)T^{10}$, $T^{17}C(O)_tN(T^{11})T^{10}$, $-SO_3H$, $-S(O)_tT^{10}$, $S(O)_tN(T^{11})T^{10}$, $-T^{12}-NT^{14}T^{15}$, $-T^{12}-N(T^{11})-T^{13}-NT^{14}T^{15}$, $-T^{12}-N(T^{16})-T^{15}-T^{10}$ or $-T^{12}-N(T^{16})-T^{13}-H$;

t is 1 or 2;

T^{10} is alkyl, (hydroxy)alkyl, (alkoxy)alkyl, alkenyl, alkynyl, cycloalkyl,

(cycloalkyl)alkyl, cycloalkenyl, (cycloalkenyl)alkyl, aryl, (aryl)alkyl, heterocyclo, (heterocyclo)alkyl, heteroaryl or (heteroaryl)alkyl;

25 T^{12} and T^{13} are each independently a single bond, $-T^{17}-S(O)_t-T^{18}-$, $-T^{17}-C(O)-T^{18}-$, $-T^{17}-C(S)-T^{18}-$, $-T^{17}-O-T^{18}-$, $-T^{17}-S-T^{18}-$, $-T^{17}-O-C(O)-T^{18}-$, $-T^{17}-C(O)_tT^{18}-$, $-T^{17}-C(=NT^{19})-T^{18}-$ or $-T^{17}-C(O)-C(O)-T^{18}-$;

T^{11} , T^{14} , T^{15} , T^{16} and T^{19} are each independently

- (i) hydrogen, alkyl, (hydroxy)alkyl, (alkoxy)alkyl, alkenyl, alkynyl, cycloalkyl, (cycloalkyl)alkyl, cycloalkenyl, (cycloalkenyl)alkyl, aryl, (aryl)alkyl, heterocyclo, (heterocyclo)alkyl, heteroaryl or (heteroaryl)alkyl, any of which may be optionally independently

substituted where valence permits by one or more groups selected from alkyl, (hydroxy)alkyl, halo, cyano, nitro, OH, oxo, (alkoxy)alkyl, alkenyl, alkynyl, cycloalkyl, (cycloalkyl)alkyl, cycloalkenyl, (cycloalkenyl)alkyl, aryl, (aryl)alkyl, heterocyclo, (heterocyclo)alkyl, heteroaryl, (heteroaryl)alkyl, —SH, —ST²², —C(O)_tH, —C(O)_tT²², —O—C(O)T²² and —S(O)_tT²²; or

5 (ii) halo, cyano, nitro, OH, oxo, —SH, amino, —OT²², —ST²², —C(O)_tH, —C(O)_tT²², —O—C(O)T²², —SO₃H, or —S(O)_tT²²; or

(iii) T¹⁴ and T¹⁵ may together be alkylene or alkenylene, completing a 3- to 10 8-membered saturated or unsaturated ring together with the atoms to which they are attached, which ring is substituted with one or more groups listed in the description of T²⁰; or

15 (iv) T¹⁴ or T¹⁵, together with T¹¹, may be alkylene or alkenylene completing a 3- to 8-membered saturated or unsaturated ring together with the nitrogen atoms to which they are attached, which ring is substituted with one or more groups listed in the description of T²⁰; or

(v) T¹⁴ and T¹⁵ or T¹¹ and T¹⁶ together with the nitrogen atom to which they are attached may combine to form a group —N=CT²⁰T²¹;

17 and T¹⁸ are each independently a single bond, alkylene, alkenylene or alkynylene; 20 T²⁰ and T²¹ are each

i. independently hydrogen, alkyl, (hydroxy)alkyl, (alkoxy)alkyl, alkenyl, 25 alkynyl, cycloalkyl, (cycloalkyl)alkyl, cycloalkenyl, (cycloalkenyl)alkyl, aryl, (aryl)alkyl, heterocyclo, (heterocyclo)alkyl, heteroaryl or (heteroaryl)alkyl, any of which may be optionally independently substituted where valence permits by one or more groups selected from alkyl, (hydroxy)alkyl, halo, cyano, nitro, OH, oxo, (alkoxy)alkyl, alkenyl, alkynyl, cycloalkyl, (cycloalkyl)alkyl, cycloalkenyl, (cycloalkenyl)alkyl, aryl, (aryl)alkyl, heterocyclo, (heterocyclo)alkyl, heteroaryl, (heteroaryl)alkyl, —SH, —ST²², —C(O)_tH, —C(O)_tT²², —O—C(O)T²² and —S(O)_tT²²; or

30 ii. halo, cyano, nitro, OH, oxo, —SH, amino, —OT²², —ST²², —C(O)_tH, —C(O)_tT²², —O—C(O)T²², —SO₃H, —S(O)_tT²² or S(O)_tN(T¹¹)T²²; and

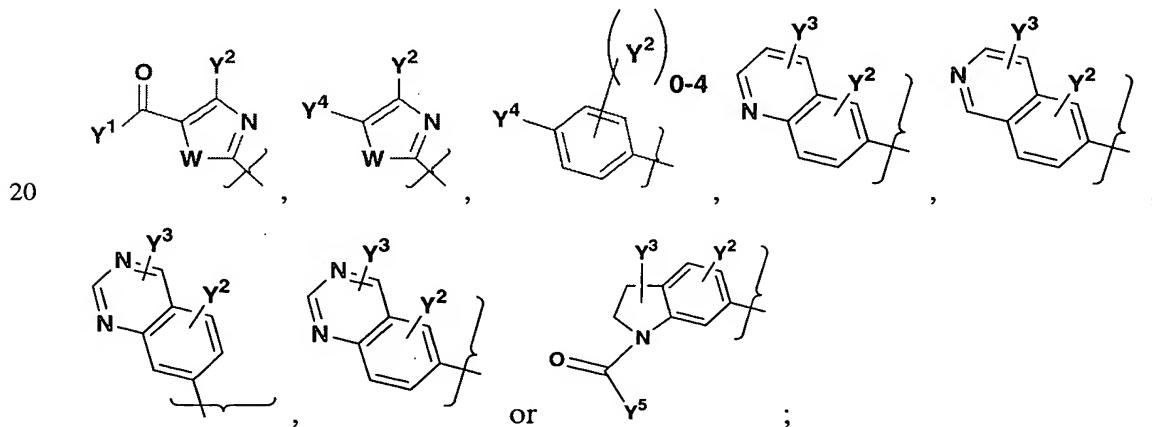
T^{22} is alkyl, (hydroxy)alkyl, (alkoxy)alkyl, alkenyl, alkynyl, cycloalkyl, (cycloalkyl)alkyl, cycloalkenyl, (cycloalkenyl)alkyl, aryl, (aryl)alkyl, heterocyclo, (heterocyclo)alkyl, heteroaryl or (heteroaryl)alkyl.

5 2. A compound of claim 1, their enantiomers, diastereomers, and pharmaceutically acceptable salts, prodrugs and solvates thereof, wherein

R^2 is

- (a) heteroaryl optionally independently substituted with one to three groups selected from T^1 , T^2 and/or T^3 ;
- 10 (b) aryl substituted with one to three groups selected from T^1 , T^2 , and/or T^3 provided that at least one of T^1 , T^2 and/or T^3 is other than H; or
- (c) aryl fused to a heteroaryl or heterocyclo ring forming a fused ring system bound to N^* through the aryl wherein the fused ring system may be 15 optionally independently substituted with one to three groups selected from T^1 , T^2 and/or T^3 .

3. A compound of claim 2, their enantiomers, diastereomers, and pharmaceutically acceptable salts, prodrugs and solvates thereof, wherein R^2 is chosen from:



W is O or S;

Y^1 is $-NHT^{15}$ or OT^{10} ;

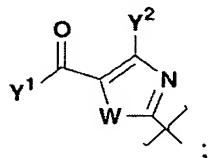
25 Y^2 and Y^3 are independently hydrogen, halo, OT^{10} , alkyl or haloalkyl;

Y^4 is optionally substituted heteroaryl, cyano, $C(O)_tT^{10}$ or $S(O)_tNT^{14}T^{15}$; and

Y^5 is alkyl, haloalkyl, NHT^{15} or OT^{10} .

4. A compound of claim 3, their enantiomers, diastereomers, and pharmaceutically acceptable salts, prodrugs and solvates thereof, wherein:

R^2 is



W is O or S;

Y^1 is $-NHT^{15}$ or OT^{10} ; or

Y^2 is alkyl or haloalkyl.

5. A compound of claim 1, their enantiomers, diastereomers, and 10 pharmaceutically acceptable salts, prodrugs and solvates thereof, wherein:

R^1 is H;

J^1 is O, S or optionally substituted C_1 alkylene;

J^2 is $C(O)$ or optionally substituted C_{1-3} alkylene.;

Z is $-NR^3R^4$ or halo;

15 R^3 is H or alkyl;

R^4 is alkyl, cycloalkyl, heterocyclo, (heteroaryl)alkyl, (heterocyclo)alkyl or (aryl)alkyl, any of which is optionally independently substituted where valence allows with one to three groups selected from alkyl, hydroxyalkyl, halo, cyano, OH, oxo, cycloalkyl, cycloalkenyl, heterocyclo, heteroaryl, $-C(O)_t$, T^{10} , $-C(O)_tH$, $-NHC(O)T^{10}$, $C(O)N(T^{14})(T^{15})$, OT^{10} , ST^{10} , $S(O)_3H$, $S(O)_tT^{10}$, $S(O)_tN(T^{10})(T^{11})$, $T^{12}N(T^{14})(T^{15})$ and $T^{12}N(T^{16})-T^{15}-T^{10}$;

20 or R^3 and R^4 may be taken together with the nitrogen atom to which they are attached to form a heterocyclo or heteroaryl ring, either of which may be optionally independently substituted where valence allows with one to three groups

25 selected from alkyl, hydroxyalkyl, halo, cyano, OH, oxo, cycloalkyl, cycloalkenyl, heterocyclo, heteroaryl, $-C(O)_tT^{10}$, $-C(O)_tH$, $-NHC(O)T^{10}$, $C(O)N(T^{14})(T^{15})$, OT^{10} , ST^{10} , $S(O)_3H$, $S(O)_tT^{10}$, $S(O)_tN(T^{14})(T^{15})$, $T^{12}N(T^{14})(T^{15})$ and $T^{12}N(T^{16})-T^{15}-T^{10}$,

wherein each heterocyclo or heteroaryl is further optionally substituted by one to three groups independently selected from cyano, oxo, hydroxy, alkyl, halo, haloalkyl and $-OT^{10}$;

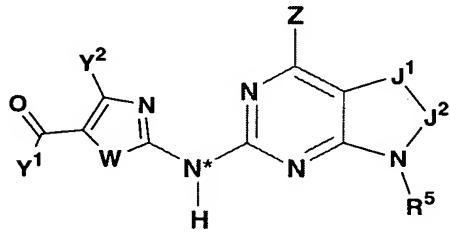
R^5 is alkyl, cycloalkyl, (cycloalkyl)alkyl, (aryl)alkyl, (heterocyclo)alkyl or

5 (heteroaryl)alkyl, any of which may be optionally independently substituted where valence permits with one to three groups selected from cyano, oxo, hydroxy, alkyl, halo, haloalkyl, $-OT^{10}$, $-C(O)_tN(T^{14})(T^{15})$, $-C(O)_tNH$ $S(O)_t(T^{11})$, $-S(O)_tT^{10}$, $-S(O)_tN(T^{14})(T^{15})$, $T^{12}N(T^{14})(T^{15})$, $-C(O)_tT^{11}$, heterocyclo and heteroaryl,

10 wherein each heterocyclo or heteroaryl is further optionally substituted by one to three groups selected from cyano, oxo, hydroxy, alkyl, halo, haloalkyl, and $-OT^{10}$.

6. A compound of Formula (Ia)

15



(Ia)

their enantiomers, diastereomers, and pharmaceutically acceptable salts, prodrugs and solvates thereof, wherein:

20 W is O or S ;

Y^1 is $-NHT^{15}$ or OT^{10} ;

Y^2 is alkyl or haloalkyl;

Z is $-NR^3R^4$ or halogen;

J^1 is O or optionally substituted C_{1-3} alkylene;

25 J^2 is carbonyl or optionally substituted C_{1-3} alkylene, provided that J^1 and J^2 taken together do not form an alkylene chain of greater than 4 carbon atoms;

R^3 and R^4 are independently H , alkyl, alkenyl, aryl, (aryl)alkyl, heteroaryl, (heteroaryl)alkyl, cycloalkyl, (cycloalkyl)alkyl, heterocyclo or

(heterocyclo)alkyl, any of which may be optionally independently substituted where valance allows with one to three groups T^4 , T^5 and/or T^6 ;
 or R^3 and R^4 may be taken together with the nitrogen atom to which they are attached to form a heterocyclo or heteroaryl ring, either of which is optionally independently substituted where valance allows with one to three groups independently selected from T^4 , T^5 and/or T^6 ;

5

 R^5 is

10

- (i) H, cyano, alkyl, alkenyl, alkynyl, cycloalkyl, (cycloalkyl)alkyl, aryl, (aryl)alkyl, heterocyclo, (heterocyclo)alkyl, heteroaryl or (heteroaryl)alkyl, any of which may be independently substituted where valance allows with one to three groups T^7 , T^8 and/or T^9 ; or
- (ii) $-C(O)_tR^7$, $-C(O)-C(O)-C(O)OR^7$ or $-SO_2R^8$;

15

R^6 is alkyl, alkenyl, aryl, (aryl)alkyl, heteroaryl, (heteroaryl)alkyl, cycloalkyl, (cycloalkyl)alkyl, heterocyclo or (heterocyclo)alkyl, any of which may be optionally independently substituted where valance allows with one to three groups T^4 , T^5 and/or T^6 ;

 R^7 is

20

- (i) H, alkyl, alkenyl, heterocyclo, (heterocyclo)alkyl, (hydroxy)alkyl, (alkoxy)alkyl, (aryloxy)alkyl, heteroaryl, aryl or (aryl)alkyl, any of which may be optionally independently substituted where valance allows with one to three groups T^7 , T^8 and/or T^9 ; or
- (ii) $-NR^9R^{10}$ or $(NR^9R^{10})alkyl$;

 R^8 is

25

- (i) alkyl, alkenyl, heterocyclo, (heterocyclo)alkyl, (hydroxy)alkyl, (alkoxy)alkyl, (aryloxy)alkyl, heteroaryl, aryl or (aryl)alkyl, any of which may be optionally independently substituted where valance allows with one to three groups T^7 , T^8 and/or T^9 ; or
- (ii) $-NR^9R^{10}$ or $(NR^9R^{10})alkyl$;

R^9 and R^{10} are independently H, alkyl, alkenyl, aryl, (aryl)alkyl, heteroaryl,

30

(heteroaryl)alkyl, cycloalkyl, (cycloalkyl)alkyl, heterocyclo or (heterocyclo)alkyl, any of which may be optionally independently substituted where valance allows with one to three groups T^7 , T^8 and/or T^9 ;

T^1 - T^9 are each independently

(i) alkyl, (hydroxy)alkyl, (alkoxy)alkyl, alkenyl, alkynyl, cycloalkyl, (cycloalkyl)alkyl, cycloalkenyl, (cycloalkenyl)alkyl, aryl, (aryl)alkyl, heterocyclo, (heterocyclo)alkyl, heteroaryl or (heteroaryl)alkyl, any of which may be optionally independently substituted by one or more groups selected from alkyl, (hydroxy)alkyl, halo, cyano, nitro, OH, oxo, (alkoxy)alkyl, alkenyl, alkynyl, cycloalkyl, (cycloalkyl)alkyl, aryl, (aryl)alkyl, heterocyclo, (heterocyclo)alkyl, heteroaryl or (heteroaryl)alkyl, $-OT^{10}$, $-SH$, $-ST^{10}$, $-C(O)_tH$, $-C(O)_tT^{10}$, $-O-C(O)T^{10}$, $-SO_3H$, $-S(O)_tT^{10}$, $T^{17}C(O)_tN(T^{11})T^{10}$, $S(O)_tN(T^{11})T^{10}$, $-T^{12}-NT^{14}T^{15}$, $-T^{12}-N(T^{11})-T^{13}-NT^{14}T^{15}$, $-T^{12}-N(T^{16})-T^{15}-T^{10}$ and $-T^{12}-N(T^{16})-T^{13}-H$; or

(ii) halo, cyano, nitro, OH, oxo, $-SH$, amino, $-OT^{10}$, $-ST^{10}$, $-C(O)_tH$, $-C(O)_tT^{10}$, $-O-C(O)T^{10}$, $T^{17}C(O)_tN(T^{11})T^{10}$, $-SO_3H$, $-S(O)_tT^{10}$, $S(O)_tN(T^{11})T^{10}$, $-T^{12}-NT^{14}T^{15}$, $-T^{12}-N(T^{11})-T^{13}-NT^{14}T^{15}$, $-T^{12}-N(T^{16})-T^{15}-T^{10}$ or $-T^{12}-N(T^{16})-T^{13}-H$;

t is 1 or 2;

T^{10} is alkyl, (hydroxy)alkyl, (alkoxy)alkyl, alkenyl, alkynyl, cycloalkyl, (cycloalkyl)alkyl, cycloalkenyl, (cycloalkenyl)alkyl, aryl, (aryl)alkyl, heterocyclo, (heterocyclo)alkyl, heteroaryl or (heteroaryl)alkyl;

T^{12} and T^{13} are each independently a single bond, $-T^{17}-S(O)_t-T^{18}-$, $-T^{17}-C(O)-T^{18}-$, $-T^{17}-C(S)-T^{18}-$, $-T^{17}-O-T^{18}-$, $-T^{17}-S-T^{18}-$, $-T^{17}-O-C(O)-T^{18}-$, $-T^{17}-C(O)_tT^{18}-$, $-T^{17}-C(=NT^{19})-T^{18}-$ or $-T^{17}-C(O)-C(O)-T^{18}-$;

T^{11} , T^{14} , T^{15} , T^{16} and T^{19} are each independently

(i) hydrogen, alkyl, (hydroxy)alkyl, (alkoxy)alkyl, alkenyl, alkynyl, cycloalkyl, (cycloalkyl)alkyl, cycloalkenyl, (cycloalkenyl)alkyl, aryl, (aryl)alkyl, heterocyclo, (heterocyclo)alkyl, heteroaryl or (heteroaryl)alkyl, any of which may be optionally independently substituted where valence permits by one or more groups selected from alkyl, (hydroxy)alkyl, halo, cyano, nitro, OH, oxo, (alkoxy)alkyl, alkenyl, alkynyl, cycloalkyl, (cycloalkyl)alkyl, cycloalkenyl, (cycloalkenyl)alkyl, aryl, (aryl)alkyl, heterocyclo, (heterocyclo)alkyl,

heteroaryl, (heteroaryl)alkyl, —SH, —ST²², —C(O)_tH, -C(O)_tT²², —O-C(O)T²² and -S(O)_tT²² or

(ii) halo, cyano, nitro, OH, oxo, -SH, amino, —OT²², —ST²², —C(O)_tH, -C(O)_tT²², —O-C(O)T²², —SO₃H, -S(O)_tT²² or S(O)_tN(T¹¹)T²²; or

5 (iii) T¹⁴ and T¹⁵ may together be alkylene or alkenylene, completing a 3- to 8-membered saturated or unsaturated ring together with the atoms to which they are attached, which ring is substituted with one or more groups listed in the description of T²⁰; or

(iv) T¹⁴ or T¹⁵, together with T¹¹, may be alkylene or alkenylene

10 completing a 3- to 8-membered saturated or unsaturated ring together with the nitrogen atoms to which they are attached, which ring is substituted with one or more groups listed in the description of T²⁰; or

(v) T¹⁴ and T¹⁵ or T¹¹ and T¹⁶ together with the nitrogen atom to which they are attached may combine to form a group -N=CT²⁰T²¹;

15 T¹⁷ and T¹⁸ are each independently a single bond, alkylene, alkenylene or alkynylene; T²⁰ and T²¹ are each

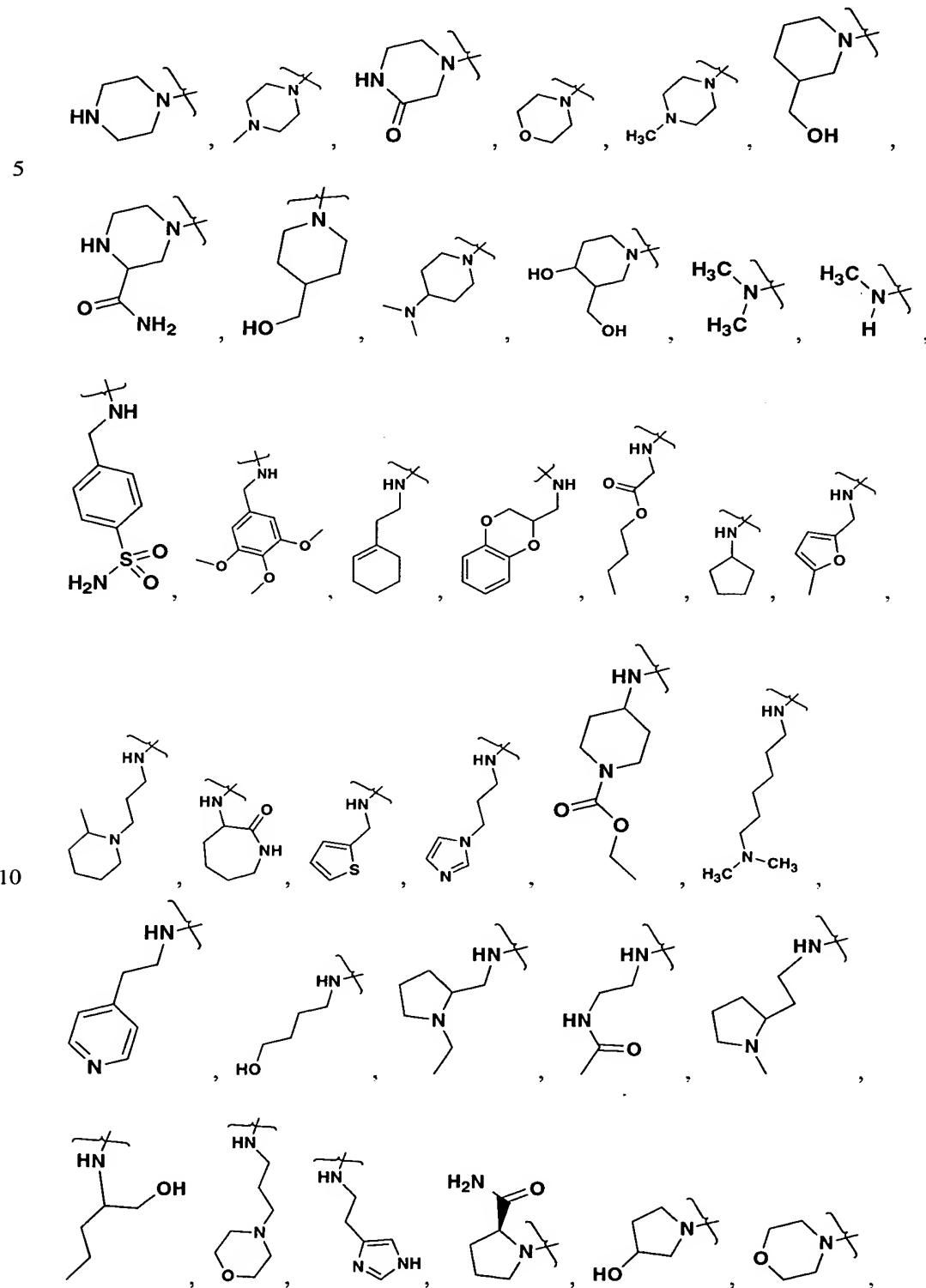
(i) independently hydrogen, alkyl, (hydroxy)alkyl, (alkoxy)alkyl, alkenyl, alkynyl, cycloalkyl, (cycloalkyl)alkyl, cycloalkenyl, (cycloalkenyl)alkyl, aryl, (aryl)alkyl, heterocyclo, (heterocyclo)alkyl, heteroaryl or (heteroaryl)alkyl, any of which may be optionally

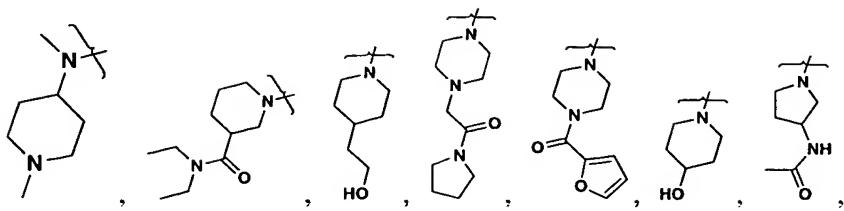
20 independently substituted where valence permits by one or more groups selected from alkyl, (hydroxy)alkyl, halo, cyano, nitro, OH, oxo, (alkoxy)alkyl, alkenyl, alkynyl, cycloalkyl, (cycloalkyl)alkyl, cycloalkenyl, (cycloalkenyl)alkyl, aryl, (aryl)alkyl, heterocyclo, (heterocyclo)alkyl, heteroaryl, (heteroaryl)alkyl, —SH, —ST²², —C(O)_tH, -C(O)_tT²², —O-C(O)T²² and -S(O)_tT²²; or

25 (ii) halo, cyano, nitro, OH, oxo, -SH, amino, —OT²², —ST²², —C(O)_tH, -C(O)_tT²², —O-C(O)T²², —SO₃H, -S(O)_tT²² or S(O)_tN(T¹¹)T²²; and

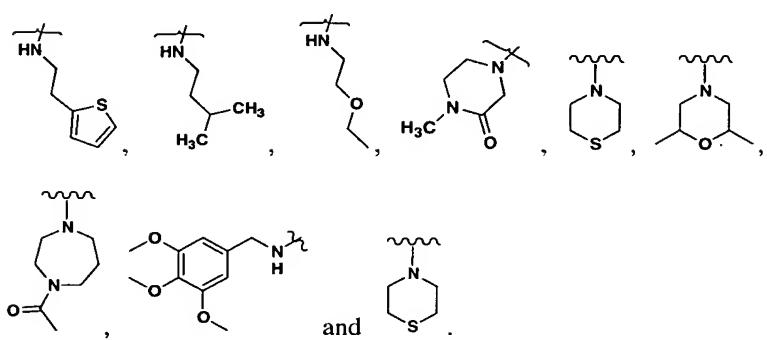
T²² is alkyl, (hydroxy)alkyl, (alkoxy)alkyl, alkenyl, alkynyl, cycloalkyl, (cycloalkyl)alkyl, cycloalkenyl, (cycloalkenyl)alkyl, aryl, (aryl)alkyl, heterocyclo, (heterocyclo)alkyl, heteroaryl or (heteroaryl)alkyl.

7. A compound of claim 6, their enantiomers, diastereomers, and pharmaceutically acceptable salts, prodrugs and solvates thereof, wherein Z is selected from:



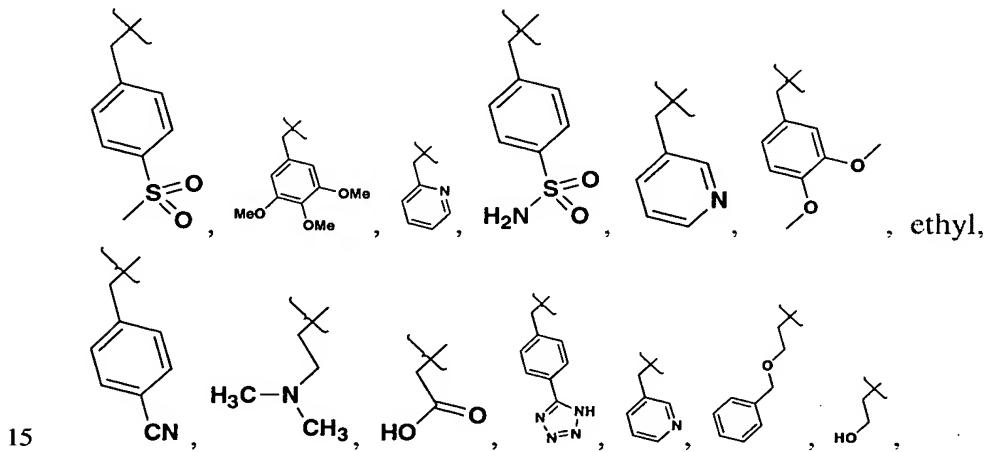


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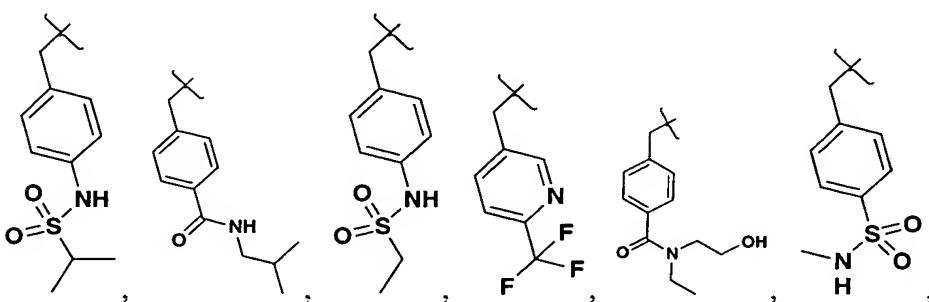
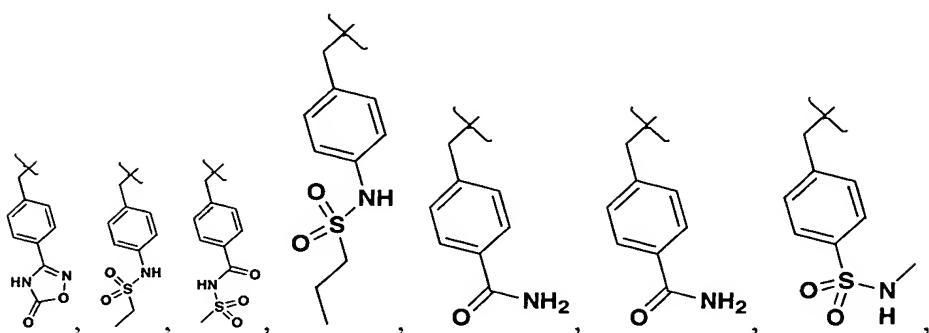
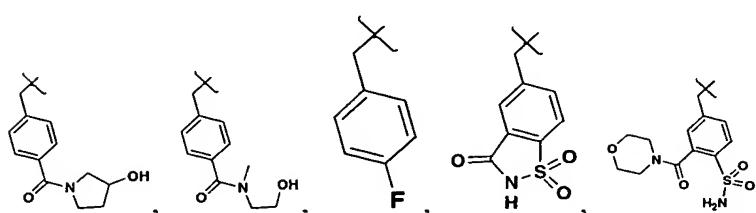
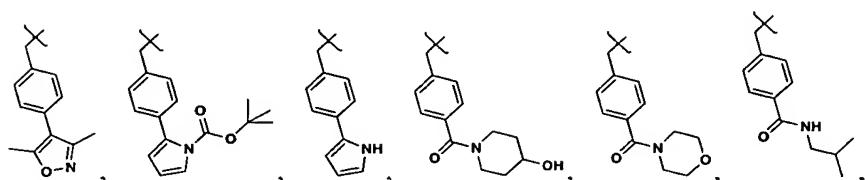
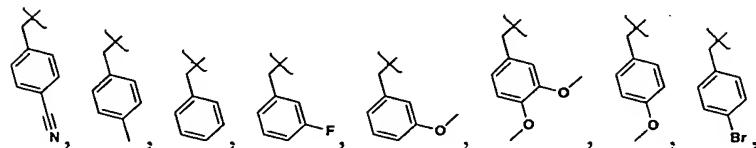
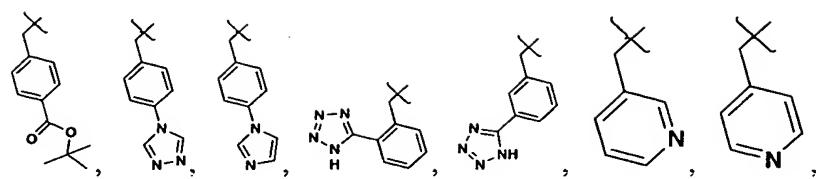


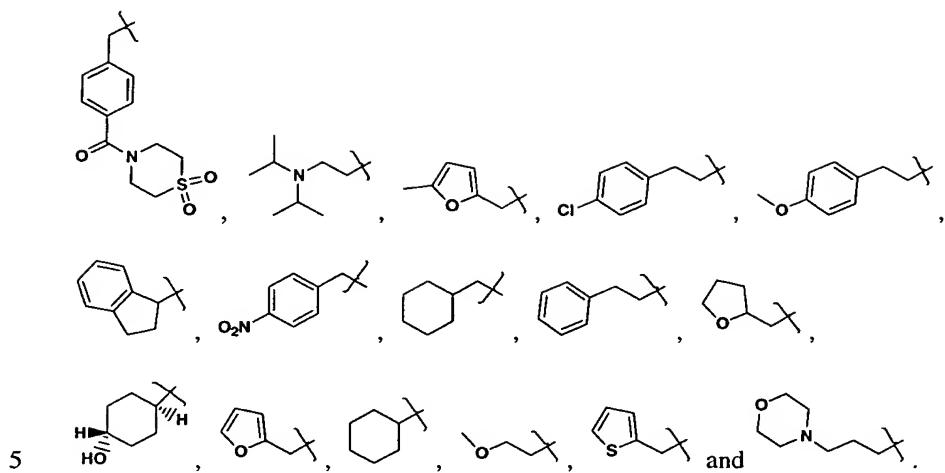
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8. A compound of claim 6, their enantiomers, diastereomers, and pharmaceutically acceptable salts, prodrugs and solvates thereof, wherein R^5 is selected from:

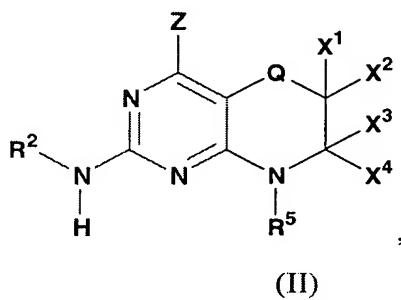


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9. A compound of claim 1 having Formula (II)



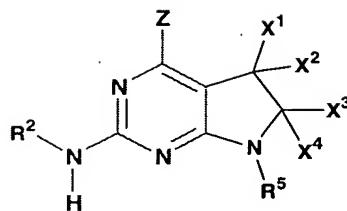
their enantiomers, diastereomers, and pharmaceutically acceptable salts, prodrugs and solvates thereof,

wherein:

15 Q is O, S or optionally substituted C₁ alkylene; and
 X^1 , X^2 , X^3 and X^4 are
 (i) independently chosen from hydrogen, T¹⁰, OT¹⁰ and NT¹⁴T¹⁵; or
 (ii) X^1 and X^2 or X^3 and X^4 may be taken together to be a carbonyl group.

20 10. A compound of claim 9, their enantiomers, diastereomers, and pharmaceutically acceptable salts, prodrugs and solvates thereof, wherein Q is $-\text{CH}_2-$ or O.

11. A compound of claim 1 having Formula (III)



(III)

their enantiomers, diastereomers, and pharmaceutically acceptable salts, prodrugs and solvates thereof,

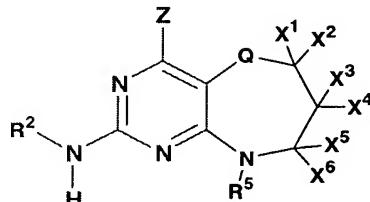
5 wherein:

X^1 , X^2 , X^3 and X^4 are

- (i) independently chosen from hydrogen, T^{10} , OT^{10} or $NT^{14}T^{15}$; and/or
- (ii) either X^1 and X^2 or X^3 and X^4 may be taken together to be a carbonyl group.

10 12. A compound of claim 11, their enantiomers, diastereomers, and pharmaceutically acceptable salts, prodrugs and solvates thereof, wherein X_3 and X_4 are taken together to be a carbonyl group.

13. A compound of claim 1 having Formula (IV)



IV

15 their enantiomers, diastereomers, and pharmaceutically acceptable salts, prodrugs and solvates thereof,

wherein:

20 Q is O, S or optionally substituted C_1 alkylene; and

X^1 , X^2 , X^3 , X^4 , X^5 and X^6 are

- (i) independently chosen from hydrogen, T^{10} , OT^{10} or $NT^{14}T^{15}$; and/or
- (ii) any one of X^1 and X^2 or X^3 and X^4 or X^5 and X^6 may be taken together to be a carbonyl group.

25

14. A compound selected from

i. 2-[7-(4-Methanesulfonyl-benzyl)-4-morpholin-4-yl-5,6-dihydro-pyrrolo[2,3-d]pyrimidin2-ylamino]-4-methyl-thiazole-5-carboxylic acid ethyl ester;

2-[7-(4-Methanesulfonyl-benzyl)-4-methylamino-5,6-dihydro-pyrrolo[2,3-d]pyrimidin-2-ylamino]- 4-methyl-thiazole-5-carboxylic acid ethyl ester;

5

2-[7-(3,4-Dimethoxy-benzyl)-4-(3-oxo-piperazin-1-yl)-5,6-dihydro-pyrrolo[2,3-d]pyrimidin-2-ylamino]-4-methyl-thiazole-5-carboxylic acid ethyl ester;

2-[4-(2-Cyclohex-1-enyl-ethylamino)-7-pyridin-3-ylmethyl-5,6-dihydro-pyrrolo[2,3-d]pyrimidin-2-ylamino]-4-methyl-thiazole-5-carboxylic acid ethyl ester;

10

2-[4-(Butoxycarbonylmethyl-amino)-7-pyridin-3-ylmethyl-5,6-dihydro-pyrrolo[2,3-d]pyrimidin-2-ylamino]-4-methyl-thiazole-5-carboxylic acid ethyl ester;

15

2-(4-Cyclopentylamino-7-pyridin-3-ylmethyl-5,6-dihydro-pyrrolo[2,3-d]pyrimidin-2-ylamino)-4-methyl-thiazole-5-carboxylic acid ethyl ester;

20

4-Methyl-2-{4-[(5-methyl-furan-2-ylmethyl)-amino]-7-pyridin-3-ylmethyl-5,6-dihydro-pyrrolo[2,3-d]pyrimidin-2-ylamino}-thiazole-5-carboxylic acid ethyl ester;

4-Methyl-2-{4-[3-(2-methyl-piperidin-1-yl)-propylamino]-7-pyridin-3-ylmethyl-5,6-dihydro-pyrrolo[2,3-d]pyrimidin-2-ylamino}-thiazole-5-carboxylic acid ethyl ester;

4-Methyl-2-[4-(2-oxo-azepan-3-ylamino)-7-pyridin-3-ylmethyl-5,6-dihydro-pyrrolo[2,3-d]pyrimidin-2-ylamino]-thiazole-5-carboxylic acid ethyl ester;

5 4-Methyl-2-{7-pyridin-3-ylmethyl-4-[(thiophen-2-ylmethyl)-amino]-5,6-dihydro-pyrrolo[2,3-d]pyrimidin-2-ylamino}-thiazole-5-carboxylic acid ethyl ester;

2-[4-(3-Imidazol-1-yl-propylamino)-7-pyridin-3-ylmethyl-5,6-dihydro-pyrrolo[2,3-d]pyrimidin-2-ylamino]-4-methyl-thiazole-5-carboxylic acid ethyl ester;

10 4-Methyl-2-[4-(1-carboxyethyl-piperidin-4-ylamino)-7-pyridin-3-ylmethyl-5,6-dihydro-pyrrolo[2,3-d]pyrimidin-2-ylamino]-thiazole-5-carboxylic acid ethyl ester;

2-[4-(6-Dimethylamino-hexylamino)-7-pyridin-3-ylmethyl-5,6-dihydro-pyrrolo[2,3-d]pyrimidin-2-ylamino]-4-methyl-thiazole-5-carboxylic acid ethyl ester;

15 4-Methyl-2-[4-(2-pyridin-4-yl-ethylamino)-7-pyridin-3-ylmethyl-5,6-dihydro-pyrrolo[2,3-d]pyrimidin-2-ylamino]-thiazole-5-carboxylic acid ethyl ester;

2-[4-(4-Hydroxy-butylamino)-7-pyridin-3-ylmethyl-5,6-dihydro-pyrrolo[2,3-d]pyrimidin-2-ylamino]-4-methyl-thiazole-5-carboxylic acid ethyl ester;

20 2-{4-[(1-Ethyl-pyrrolidin-2-ylmethyl)-amino]-7-pyridin-3-ylmethyl-5,6-dihydro-pyrrolo[2,3-d]pyrimidin-2-ylamino}-4-methyl-thiazole-5-carboxylic acid ethyl ester;

2-[4-(2-Acetylamino-ethylamino)-7-pyridin-3-ylmethyl-5,6-dihydro-pyrrolo[2,3-d]pyrimidin-2-ylamino]-4-methyl-thiazole-5-carboxylic acid ethyl ester;

4-Methyl-2-{4-[2-(1-methyl-pyrrolidin-2-yl)-ethylamino]-7-pyridin-3-ylmethyl-5,6-dihydro-pyrrolo[2,3-d]pyrimidin-2-ylamino}-thiazole-5-carboxylic acid ethyl ester;

2-[4-(1-Hydroxymethyl-butylamino)-7-pyridin-3-ylmethyl-5,6-dihydro-pyrrolo[2,3-d]pyrimidin-2-ylamino]-4-methyl-thiazole-5-carboxylic acid ethyl ester;

4-Methyl-2-[4-(3-morpholin-4-yl-propylamino)-7-pyridin-3-ylmethyl-5,6-dihydro-pyrrolo[2,3-d]pyrimidin-2-ylamino]-thiazole-5-carboxylic acid ethyl ester;

2-{4-[2-(1H-Imidazol-4-yl)-ethylamino]-7-pyridin-3-ylmethyl-5,6-dihydro-pyrrolo[2,3-d]pyrimidin-2-ylamino}-4-methyl-thiazole-5-carboxylic acid ethyl ester;

2-[4-{(S)-2-Carbamoyl-pyrrolidin-1-yl}-7-pyridin-3-ylmethyl-5,6-dihydro-pyrrolo[2,3-d]pyrimidin-2-ylamino]-4-methyl-thiazole-5-carboxylic acid ethyl ester;

2-[4-(3-Hydroxy-pyrrolidin-1-yl)-7-pyridin-3-ylmethyl-5,6-dihydro-pyrrolo[2,3-d]pyrimidin-2-ylamino]-4-methyl-thiazole-5-carboxylic acid ethyl ester;

4-Methyl-2-(4-morpholin-4-yl-7-pyridin-3-ylmethyl-5,6-dihydro-pyrrolo[2,3-d]pyrimidin-2-ylamino)-thiazole-5-carboxylic acid ethyl ester;

4-Methyl-2-{4-[methyl-(1-methyl-piperidin-4-yl)-amino]-7-pyridin-3-ylmethyl-5,6-dihydro-pyrrolo[2,3-d]pyrimidin-2-ylamino}-thiazole-5-carboxylic acid ethyl ester;

2-[4-(3-Diethylcarbamoyl-piperidin-1-yl)-7-pyridin-3-ylmethyl-5,6-dihydro-5
pyrrolo[2,3-d]pyrimidin-2-ylamino]-4-methyl-thiazole-5-carboxylic acid ethyl ester;

2-{4-[4-(2-Hydroxy-ethyl)-piperidin-1-yl]-7-pyridin-3-ylmethyl-5,6-dihydro-
pyrrolo[2,3-d]pyrimidin-2-ylamino}-4-methyl-thiazole-5-carboxylic acid ethyl ester;

10 4-Methyl-2-{4-[4-(2-oxo-2-pyrrolidin-1-yl-ethyl)-piperazin-1-yl]-7-pyridin-3-ylmethyl-5,6-dihydro-pyrrolo[2,3-d]pyrimidin-2-ylamino}-thiazole-5-carboxylic acid ethyl ester;

2-{4-[4-(Furan-2-carbonyl)-piperazin-1-yl]-7-pyridin-3-ylmethyl-5,6-dihydro-
pyrrolo[2,3-d]pyrimidin-2-ylamino}-4-methyl-thiazole-5-carboxylic acid ethyl ester,
15 2-[4-(4-Hydroxy-piperidin-1-yl)-7-pyridin-3-ylmethyl-5,6-dihydro-
pyrrolo[2,3-d]pyrimidin-2-ylamino]-4-methyl-thiazole-5-carboxylic acid ethyl ester;

2-[4-(3-Acetylamino-pyrrolidin-1-yl)-7-pyridin-3-ylmethyl-5,6-dihydro-
pyrrolo[2,3-d]pyrimidin-2-ylamino]-4-methyl-thiazole-5-carboxylic acid ethyl ester;

20 2-{4-[Ethyl-(1-ethyl-pyrrolidin-3-yl)-amino]-7-pyridin-3-ylmethyl-5,6-
dihydro-pyrrolo[2,3-d]pyrimidin-2-ylamino}-4-methyl-thiazole-5-carboxylic acid ethyl ester;

4-Methyl-2-[4-(4-carboxyethyl-piperidin-1-yl)-7-pyridin-3-ylmethyl-5,6-dihydro-pyrrolo[2,3-d]pyrimidin-2-ylamino]-thiazole-5-carboxylic acid ethyl ester;

5 2-[4-(4-Acetyl-piperazin-1-yl)-7-pyridin-3-ylmethyl-5,6-dihydro-pyrrolo[2,3-d]pyrimidin-2-ylamino]-4-methyl-thiazole-5-carboxylic acid ethyl ester;

4-Methyl-2-[4-[3-(2-oxo-pyrrolidin-1-yl)-propylamino]-7-[4-(1H-tetrazol-5-yl)-benzyl]-5,6-dihydro-pyrrolo[2,3-d]pyrimidin-2-ylamino]-thiazole-5-carboxylic acid ethyl ester;

10 4-Methyl-2-(4-morpholin-4-yl-6-oxo-7-pyridin-4-ylmethyl-5,6-dihydro-pyrrolo[2,3-d]pyrimidin-2-ylamino)-thiazole-5-carboxylic acid ethyl ester;

4-Methyl-2-[4-morpholin-4-yl-8-(4-sulfamoyl-benzyl)-5,6,7,8-tetrahydro-pyrido[2,3-d]pyrimidin-2-ylamino]-thiazole-5-carboxylic acid ethyl ester;

15 4-Methyl-2-[4-methylamino-8-(4-sulfamoyl-benzyl)-5,6,7,8-tetrahydro-pyrido[2,3-d]pyrimidin-2-ylamino]-thiazole-5-carboxylic acid ethyl ester;

2-[8-(4-Ethanesulfonylamino-benzyl)-4-(3-oxo-piperazin-1-yl)-5,6,7,8-tetrahydro-pyrido[2,3-d]pyrimidin-2-ylamino]-4-methyl-thiazole-5-carboxylic acid ethyl ester;

20 2-[4-(2-Acetylamino-ethylamino)-8-(4-ethanesulfonylamino-benzyl)-5,6,7,8-tetrahydro-pyrido[2,3-d]pyrimidin-2-ylamino]-4-methyl-thiazole-5-carboxylic acid ethyl ester;

2-[8-(4-Methanesulfonylaminocarbonyl-benzyl)-4-(3-oxo-piperazin-1-yl)-
5,6,7,8-tetrahydro-pyrido[2,3-d]pyrimidin-2-ylamino]-4-methyl-
thiazole-5-carboxylic acid ethyl ester;

2-[4-(4-Hydroxy-piperidin-1-yl)-9-(4-sulfamoyl-benzyl)- 5,6,7,8-tetrahydro-
5 pyrimido[4,5-b]azepin-2-ylamino]-4-methyl-thiazole-5-carboxylic acid
ethyl ester; or

2-[4-(4-Acetyl-[1,4]diazepan-1-yl)-9-(4-sulfamoyl-benzyl)-5,6,7,8-tetrahydro-
pyrimido[4,5-b]azepin-2-ylamino]-4-methyl-thiazole-5-carboxylic acid
ethyl ester; or

10 ii. the enantiomers, diastereomers, and pharmaceutically acceptable salts,
prodrugs and solvates of each of (i).

15. A pharmaceutical composition comprising at least one compound of
claim 1.

16. The pharmaceutical composition of claim 16 comprising at least one
15 compound of claim 14.

17. The pharmaceutical composition of claim 15 further comprising at
least one additional therapeutic agent suitable for the treatment of leukocyte
activation-associated diseases.

20

18. The pharmaceutical composition of claim 17 wherein the at least one
additional therapeutic agent is selected from PDE4 inhibitors, consisting of NSAIDs,
COX-2 inhibitors, TNF- α inhibitors, beta-2 agonists, anti-cholinergic agents, and
steroids.

25 19. A method of treating leukocyte activation-associated disorders which
comprises administering an effective amount of at least one composition of claim 1 to
a patient in need thereof.

20. The method of claim 19 wherein said disorder is transplant rejection, graft versus host disease, rheumatoid arthritis, multiple sclerosis, juvenile diabetes, asthma, inflammatory bowel disease, ischemic or reperfusion injury, cell proliferation, or psoriasis.